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Amendments to the Claims:

A clean version of the entire set of pending claims, including amendments to the claims, is submitted herewith per 37 CFR 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A method of analyzing a quantity having temporal and spatial variations, wherein
- a multidimensional output data array is formed
- the multidimensional output data array comprises array positions arranged along at least a first data-axis and a second data-axis,
- values of the quantity are entered in the multidimensional output data array, such that
    - values of the quantity at substantially the same instant are entered at respective positions in the multidimensional output data array at equal positions along the first data-axis and
    - values of the quantity at substantially the same spatial position are entered at respective positions in the multidimensional output data array at equal positions along the second data-axis.

2. (Original) A method as claimed in Claim 1, wherein
- values of the quantity are acquired for respective temporal instants and for respective spatial sections and
- values of the quantity for individual spatial sections are entered at respective positions in the multidimensional output data array at equal positions along the second data-axis.

3. (Previously Presented) A method as claimed in Claim 1, wherein

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-        values of the quantity are acquired for respective time intervals and for respective spatial positions and values of the quantity for individual time interval are entered at respective positions in the multidimensional output data array at equal positions along the first data-axis.

4. (Original) A method as claimed in Claim 1, wherein
-        values of the quantity for successive time intervals are entered at adjacent positions in the multidimensional output data array and
-        values of the quantity for adjacent spatial sections are entered at adjacent positions in the multidimensional output data array.

5. (Original) A method as claimed in Claim 4, wherein values of the quantity for radially contiguous spatial sections are entered at contiguous positions in the multidimensional output data array.

6. (Original) A method as claimed in Claim 1, wherein the values of the quantity are derived from a series of images.

7. (Original) A method as claimed in Claim 6, wherein values of the quantity at respective instants are derived from respective images in said series of images.

8. (Original) A method as claimed in Claim 7, wherein respective positions in the multidimensional output data array are linked to respective spatial sections in respective images of the series.

9. (Original) A method as claimed in Claim 8, wherein the multidimensional output data array is displayed,
-        a position in the displayed multidimensional output data array is indicated and

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-       on the basis of the indicated position in the displayed multidimensional output data array the corresponding image of the series is displayed and the corresponding spatial section in the image is marked.

        10. (Original) A method as claimed in Claim 1, wherein the quantity pertains to perfusion of the myocardium.

        11. (Currently Amended) A data processing system <u>adapted to analyze a quantity having temporal and spatial variations, the system being</u> arranged to
-       form a multidimensional output data array
-       the multidimensional output data array comprising array positions arranged along at least a first data-axis and a second data axis
-       enter values of the quantity in the multidimensional output data array, such that
-       values of the quantity at substantially the same instant are entered at respective positions in the multidimensional output data array at equal positions along the first data-axis and
-       values of the quantity at substantially the same spatial position are entered at respective positions in the multidimensional output data array at equal positions along the second data-axis.

        12. (Currently Amended) A <u>computer-readable data carrier having stored therein a</u> computer program comprising instruction <u>one or more instructions</u> to
-       form a multidimensional output data array
-       the multidimensional output data array comprising array positions arranged along at least a first data-axis and a second data axis
-       enter values of the quantity in the multidimensional output data array, such that

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-      values of the quantity at substantially the same instant are entered at respective positions in the multidimensional output data array at equal positions along the first data-axis and

values of the quantity at substantially the same spatial position are entered at respective positions in the multidimensional output data array at equal positions along the second data-axis.

13. (New) The method of claim 1, further comprising displaying the multidimensional output data array.

14. (New) The method of claim 13, wherein the values of the quantity are derived from image data, and further comprising displaying the image data while displaying the multidimensional output data array.

15. (New) The method of claim 1, wherein the quantity is an average brightness value of image data.

16. (New) The method of claim 15, wherein the image data comprises perfusion data of a human myocardium.

17. (New) The system of claim 11, further comprising a display device adapted to display the multidimensional output data array.

18. (New) The system of claim 17, wherein the values of the quantity are derived from image data, and wherein the display device is further adapted to display the image data while displaying the multidimensional output data array.

19. (New) The system of claim 11, wherein the quantity is an average brightness value of image data.

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20. (New) The system of claim 19, wherein the image data comprises perfusion data of a human myocardium.